

WHAT IS CLAIMED IS:

1. A sheet processing apparatus, comprising:
  - sheet conveying means for conveying sheets;
  - first loading means for loading a sheet bundle comprising a plurality of sheets conveyed by the sheet conveying means;
  - lateral aligning means for aligning the opposite side edges of the sheet bundle loaded on the first loading means in the direction perpendicular to the sheet conveying direction;
  - stapling means for performing a stapling treatment with respect to a sheet bundle aligned by the lateral alignment means;
  - sheet bundle conveying means for conveying a sheet bundle stapled by the stapling means;
  - second loading means for loading sheet bundles conveyed by the sheet bundle conveying means; and
  - loading position control means for loading sheet bundles to be loaded onto the second loading means so that the loading positions thereof are displaced from each other along the sheet conveying direction.
2. The sheet processing apparatus according to Claim 1, wherein the second loading means is disposed below the first

loading means.

3. The sheet processing apparatus according to Claim 2, wherein the lateral alignment means comprises a first alignment member that aligns the edge on one side of a sheet bundle in the direction perpendicular to the sheet conveying direction, and a second alignment member that aligns the edge of the sheet bundle on the side opposite to the one side thereof aligned by the first alignment member, and

wherein the first and second alignment members perform alignment of a sheet bundle by moving to respective alignment positions bordering on the opposite side edges of the sheets, and wherein the first and second alignment members let the aligned sheet bundle fall onto the second loading means by moving to respective retreat positions that are spaced apart from each other by at least the length of the sheet bundle in the width direction.

4. The sheet processing apparatus according to Claim 1, wherein the loading position control means switches timing when the first and second alignment members move to the respective retreat positions, for each sheet bundle.

5. The sheet processing apparatus according to Claim 1, wherein the loading position control means switches a speed

at which the sheet bundle conveying means conveys a sheet bundle, for each sheet bundle.

6. The sheet processing apparatus according to Claim 1, wherein the loading position control means displaces the loading positions of sheet bundles to be loaded onto the second loading means from each other along the sheet conveying direction, in order to prevent the stapling positions of the sheet bundles from being superimposed on each other.

7. The sheet processing apparatus according to Claim 1, further comprising longitudinal alignment means for aligning a sheet bundle loaded on the first loading means in the sheet conveying direction.

8. The sheet processing apparatus according to Claim 7, further comprising sheet hold-down means for holding down a sheet bundle loaded on the first loading means and aligned by the lateral alignment means and the longitudinal alignment means.

9. The sheet processing apparatus according to Claim 1, wherein the sheet conveying means and the sheet bundle conveying means are driven by the same driving source.

10. The sheet processing apparatus according to Claim 9, wherein the sheet bundle conveying means is a pair of rollers comprising an upper roller and a lower roller, and wherein the sheet bundle conveying means can be switched between separation and nipping.

11. The sheet processing apparatus according to Claim 10, wherein the upper roller and the lower roller are nipped when a first sheet is loaded onto the first loading means, and wherein the upper roller and the lower roller are separated when second and later sheets are loaded onto the first loading means.

12. The sheet processing apparatus according to Claim 10, wherein the upper roller and the lower roller are arranged in a staggered configuration.

13. The sheet processing apparatus according to Claim 1, further comprising full load detecting means for detecting the full load state of sheet bundles on the second loading means.